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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,196	04/03/2006	Mathias Destarac	60838.000510	5183
21967 7590 05/04/2009 HUNTON & WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT 1900 K STREET, N.W. SUITE 1200 WASHINGTON, DC 20006-1109				
EXAMINER PEZZUTO, HELEN LEE				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
05/04/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/534,196

Applicant(s)

DESTARAC, MATHIAS

Examiner

Helen L. Pezzuto

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election of the various species in the reply filed on 4/9/09 is acknowledged.

Currently, claims 15-33 are pending in this application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 15-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (WO-929).

WO 02/28929 to Lewis et al. discloses zwitterionic polymers having controlled architectures. Prior art polymers comprises zwitterionic monomers as defined by formula I, and at least one comonomers selected from anionic, cationic, and nonionic monomers (page 4, line 4 to page 8, line 4). Suitable comonomers include those embracing the instant part B monomers, such as styrene, vinyl carboxylic esters, and alkyl (meth)acrylates as set forth in formula X (page 8, line 5 to page 9, line 7). Prior

art specifically teaches using the resultant zwitterionic polymer as intermediate for the preparation of block copolymers within the scope of the instant claims (page, 11, lines 5-17; page 16, line 22 to page 17, line 20). Accordingly it would have been obvious to one having ordinary skill in the art to prepare a block copolymer comprising a zwitterionic polymeric segment and a nonionic block segment within the scope of the instant claims, motivated by the reasonable expectation of success in preparing polymer products having controlled architectures and resultant properties.

3. Claims 15-17, 19-31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamazawa et al. (US-963).

US 6,174,963 to Tamazawa et al. discloses an amphoteric resin derived from graft polymerization of prepolymer segments A₂, B₂, and component C (see abstract, col. 2, lines 5-51; col. 5, lines 19-46). Specifically, prior art A₂ prepolymer is obtained by copolymerization of amino groups-containing basic monomers and other non-ionic comonomers within the scope of the instant cationic and neutral units (col. 3, lines 1-30), whereas B₂ prepolymer is derived from carboxyl group-containing acidic monomer within the scope of the instant anionic unit (col. 4, lines 16-46). Furthermore, other ethylenically unsaturated monomer such as (meth)acrylic acid, and (meth)acrylamide are

also suggested as suitable comonomers (col. 5, lines 25-30).

Accordingly, it would have been obvious to one having ordinary skill in the art to prepare a graft amphoteric resin comprising cationic, anionic and neutral monomeric units as suggested, motivated by the reasonable expectation of success.

4. Claims 15-16, 19-31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Das et al. (US-444) or Aubay et al. (US-156) or Bunyard et al. (US-519) or JP-09-279084.

U.S. 4,395,444 to Das et al. discloses a cationic acrylic latex derived from various ethylenically unsaturated monomers, inclusive of anionic, cationic and non-ionic monomers within the scope of the instant neutral and part B units (col. 3, lines 6 to col. 4, line 6).

US 7,071,156 to Aubay et al. discloses fabric care composition comprising polymeric nanoparticles or nanolatex comprising a hydrophobic monomer units (N), and at least one hydrophilic monomer units (F), inclusive of cationic (F1), amphoteric (F2), anionic (F3), and non-ionic (F4) monomer units or mixtures thereof (see abstract; col. 2, line 61 to col. 4, line 50). In one embodiment, copolymer of methyl methacrylate/butyl acrylate/hydroxyethyl methacrylate/methacrylic acid/N, N-dimethyl-N-methacryloxyloxyethyl-N (3-sulphopropyl)ammonium sulphobetaine

is disclosed within the scope of the instant copolymer (col. 7, lines 46-48).

US 7,141,519 to Bunyard et al. discloses ion triggerable cationic polymers comprising cationic monomers, hydrophobic monomers such as alkyl (meth)acrylate and carboxylic acid monomers within the scope of the instant part B and anionic unit (col. 6, line 31 to col. 7, line 39; see formula at col. 7, lines 20-30, wherein R₅ can be hydrogen).

JP-09-279084 discloses emulsion polymers derived from dialkylaminoalkyl (meth)acrylate, (meth)acrylamide, and itaconic acid, within the scope of the instant cationic, neutral, and anionic monomers. JP-084 further suggests other comonomers include butyl (methacrylate, vinyl acetate, styrene, acrylonitrile, and (meth)acrylic acid, embracing the instant Part B and anionic units (page 3, [0011]).

Prior art references discussed above disclose radical polymerization processes of preparing copolymer compositions comprising, cationic, anionic, neutral and part B monomer units, within the scope of those expressed in the present claims. Accordingly, it would have been obvious to one having ordinary skill in the art to prepare the various copolymer systems as taught in prior art disclosures, motivated by the reasonable

expectation of success. Thus, rendering obvious the present claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Helen L. Pezzuto/
Primary Examiner
Art Unit 1796

hlp